Reference No. 10

UNITED STATES ENVIRONMENT...

DATE JUN 17 1985

SUBJECT Consent Order No. EPD-WQ-751 (dtd 04 JAN 84) with General Electric Company, Rome, GA.

FROM Drew Peake, Environmental Engineer DP
AL/GA Unit, F.P.B., WMD

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TO FILES

BACKGROUND

Director of the Georgia Environmental Protection Division (EPD) executed NPDES Permit No. GA0024155 on March 7, 1977 for the General Electric (G.E.) Medium Transformer Plant in Rome, Georgia. This permit was reissued on December 30, 1985, to expire on December 5, 1987. G.E. is listed as a major industrial. The following Orders are referenced in EPD-WQ-751: EPD-WQ-370 (dated 07 OCT 77), EPD-WQ-406 (dated 14 NOV 78), EPD-WQ-416 (dated 18 JUL 79), and EPD-WQ-487 (dated 30 AUG 81). The permit was reissued on December 30, 1982. The current permit limits polychlorinated biphenals to 0.01 mg/l (daily max), and oil & grease to 10 mg/l and 15 mg/l (daily average and daily max) at outfalls 001 through 004. Storm runoff accounts for all the discharge from outfalls 001, 002, and 003. Groundwater seepage, storm runoff and overflow from the spray pond combine to form outfall 004. During dry weather the only discharge from outfalls 001-004 is that from groundwater seepage and the spray pond to 004. Sanitary wastes are discharged to the municipal wastewater treatment plant through outfall 005.

In 1977, G.E. agreed to provide $506,082 to the City of Rome to resolve a continuing problem with PCB contaminated sludge. That money was to install a chemical treatment system and construct a holding tank ($363,882), and to help defray the operating and maintenance expense for three years ($142,200). G.E. also agreed to remove 3.3 million gallons of PCB contaminated sludge that had accumulated at the Rome Sewage Treatment Plant.

It has been reported that the entire 68 acre site was paved to immobilize the PCB contaminated soil. If it is assumed that all the precipitation that falls on the site is discharged through outfalls 001 - 004 with PCB concentrations at the permitted limits, the mass loading would be about 3.7 kg per year of PCBs. The average annual precipitation in Rome for the 20 years ending in 1980 was 52.83 in/yr. Severe storms of any type are infrequent. The most frequent misfortune resulting from weather in this vicinity in the past has been floods on the rivers. The permit identifies the receiving waters as "unnamed tributaries to Horseleg Creek and unnamed tributaries of Little Dry Creek, both tributaries to Coosa River". Flooding, groundwater seepage and spray pond overflow could increase the total mass loading of PCBs considerably.

In 1977, EPA policy established zero discharge limits for PCBs for certain industrial source under 307(c). However, in 1977, there was a discussion between G.E. and EPD that 42 FR 6550 declassified the plant from the definition "electrical transformer plant" and therefore NPDES limits under Section 307(a) were not applicable. That discussion has no bearing on water quality based standards. EPA's position on the discharge of PCB's into the water is discussed in the attached April 29, 1985, memo on Fort Howard Paper Company (Pages 3-5).

The EPA instream criterion for PCBs at the 10^{-6} risk level is 0.079 ng/l (0.000000079 mg/l). A 3.7 kg/year mass loading, diluted by the average flow of the Coosa River (6773 cfs), would result in a concentration of 0.621 ng/l. That concentration approaches the 10^{-5} risk level of 0.79 ng/l.

The permit incorrectly states "For storm runoff detectable limits are defined by the Georgia Environmental Protection Division and the U.S. Environmental Protection Agency as 10 parts per billion (micrograms/liter)". In 1976, the detectable limit was 1 ppb (0.001 mg/l). Now the detectable limit is 0.065 ppb (0.000065 mg/l). The permit requires annual progress reports until a level of 0.001 mg/l in dry weather flow and 0.01 mg/l in all wet weather flow is achieved. Discharge limit for outfall 005, to the City of Rome's sewerage system, was set at below detectable limits (defined in the permit on page 14 as 1 ppb). Rome POTW monitors influent and has indicated that the concentration of PCBs coming into the plant "is almost always less than 1 ppb." The permit requires G.E. to monitor PCBs and flow at 005 on a daily basis. Monitoring reports must also include amount of rainfall on a daily basis. G.E. is required to collect information required to determine rainfall intensity and duration. The Consent Order (EPD-WQ-751) requires upgrading NPDES monitoring instrumentation to include state-of-the-art equipment and samplers according to the following schedule: April '84 - 001; October '84 - 002; July '84 - 003; January '85 004; and, July '85 - 005.

The G.E. plant has interim status to store hazardous wastes. On October 27, 1982, G.E. revised their RCRA Form 3 to de-list PCBs, asbestos, paint, and waste oil because these are not regulated as hazardous wastes. Their RCRA Form 3 now lists the following: 3000 lbs. ethylene dichloride and/or formic acid; 2000 lbs ethene, 1,1,2,2-tetrachloro; 50 lbs benzene, methyl; 1000 lbs benzene, dimethyl (I,T). Part B of their application was due to Georgia in January 1985.

In 1976 the State banned commercial fishing on the Coosa because of dangerous levels of PCBs that were found in the fatty tissue of fish taken from that river. The source of PCBs was believed to be the G.E. plant. Gene Welsh responded to a recent report (attached) of toxic waste contamination in the Coosa, Etowah and Oostanaula Rivers with "...The report is far from factual. It listed the problems of years ago, and not what has been done to correct it." (Atlanta Constitution 4/8/85). In the same article, Gene Welsh reported "...the last reading on fish taken from the Coosa last June showed a PCB range of zero to 15 parts per million in bottom fish and zero or near zero in sport fish such as bass". The acceptable federal level was lowered from 5 to 2 parts per million last year. When we requested recent data on PCB levels in fish taken from the Coosa from Mike Jennings of the Georgia Fish and Game Division, we were advised that we would have to go through Gene Welsh to obtain that data. There is no PCB data in STORET for the Coosa and EPD does not have a report on this issue. The Environmental Defense Fund report is attached. The Report's author, Mary Beth Zimmerman, National Governors Association identified Mike Jennings as the source of their data.

The Consent Order at hand (EPD-WQ-751) does not appear to require the kind of control measures that will lead to meeting the permit standards. The most significant measures seem to be a schedule of meetings and reports of progress towards meeting the permit limits. It would be difficult, with the information at hand, to develop an argument that the state was pursuing diligent prosecution in this case. A second problem is that if they could meet the permit limits, those limits do not insure compliance with EPA's water quality criteria for protection of human health (carcinogen) or wildlife reproduction.

PROBLEM

We may not have sufficient information in hand to respond to reasonable inquiries concerning our oversight of this permit. There is no compliance file available in the Regional Office and the EPA permit file only contains the permit. There is no information in the measurements and violations data field of the PCS and the inspection data field indicates no inspections between October 1980 and January 1985. The information that has been gathered for this summary was found piecemeal and includes sources such as general library references, Environmental Defense Fund, local newspaper, and files maintained by personnel in other program offices.

RECOMMENDATION

I think we should ask GA EPD for copies of the previous Orders, any other correspondence or information they have on compliance, and a copy of the permit file, including the application. If Georgia has recent data on PCBs in aquatic organisms and sediments in the Coosa, we should look at it; if not, we should make some attempt to gather such data. If that information is unavailable or insufficient, we may want to attend the July 15, 1985 meeting between Georgia EPD and G.E. that was set in the Consent Order to "discuss PCB effluent trends". PCS should be updated for this source.

cc: Lee Tebo, Jr., ESD